HW#10: Intro to Distance w/ Shapes + Notes

Geometry

Due: Monday, September 19th

*Complete all problems in your notebook.*

DIRECTIONS: Complete all problems in your notebook. Provide a graph for #1-2 and show all work. Failure to show work will result in a LaSalle.

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| 1. A four sided figure has vertices: C(0,0), A(0,8), R(16,8), S(16,0). 2. Is the figure a rectangle or a square? Show all work and *explain*. 3. Find the perimeter of the figure. 4. Find the area of the figure. | 1. A four sided figure has vertices: F(-2,8), D(8,8), I(8,-2), G(-2,-2).  a) is the figure a rectangle or a square? Show all work and *explain*.  b) Find the perimeter of the figure.  c) Find the area of the figure. |

DIRECTIONS: Copy the notes below into your notebook. Use the word bank to fill in the blanks below. \*\*Note: words in word bank may be used more than once.

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| Word Bank   * a * b * c | * legs * hypotenuse * missing side | | * opposite * longest * 90° * right triangle |
| ***Pythagorean Theorem:***   * + ***a, b, and c*** *are the 3 sides of a*   + ***c*** *is* ***always*** *the (longest side)*   + ***a*** *&* ***b*** *are called the “ ” of the right triangle.* * *Used to find the of a right triangle.*   ***To use the Pythagorean Theorem, you must:***   1. *Determine if it’s a .* 2. *Identify the (side “c”)*    1. *ALWAYS from the 90 angle.*    2. *ALWAYS the side of a right triangle (across from the angle)*    3. *It does not matter which leg is “ ” and which leg is “ ”*  * On the triangle to the right: * Label the right angle * Label each side (a, b, and c) | | | |
| 3. What is the length of the hypotenuse if the sides of a right triangle are 12 and 16? Draw a label a picture in your notebook. | | 4. What is the length of the hypotenuse if the sides of a right triangle are 7 and 24? Draw a label a picture in your notebook. | |